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BEFORE THE

**Federal Communications Commission**

WASHINGTON, D.C. 20554

FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF SECRETARY

ORIGINAL

In the Matter of

Replacement of Part 90 by Part 88  
to Revise the Private Land Mobile  
Radio Services and Modify the  
Policies Governing Them  
and  
Examination of Exclusivity and  
Frequency Assignment Policies of  
the Private Land Mobile Radio  
Services

PR Docket 92-235

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To: The Commission

**PETITION FOR RECONSIDERATION**

Schlumberger Meter Communication Systems (Schlumberger), by its counsel and pursuant to Section 1.106 of the Commission's rules (47 C.F.R. § 1.106), submits this Petition for Reconsideration pertaining to the Report and Order portion of the Commission's Report and Order and Further Notice of Proposed Rule Making in PR Docket 92-235 (FCC 95-255, released June 23, 1995).

Briefly stated, Schlumberger is concerned that certain aspects of the Report and Order do not comport with the Commission's fundamental decision not to require

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users to replace existing systems.<sup>1</sup> Unless the Commission recasts certain provisions of the rules it has adopted, the relief granted in this proceeding to existing users will be illusory. In particular, utilities, the users of Schlumberger's automatic meter reading (AMR) systems will be adversely impacted.

### **STANDING**

Through a joint venture with Motorola, known as Advanced Meter Reading Technologies (AMRT), Schlumberger supplies to electric, gas and water utilities lines of automatic meter reading (AMR) systems. Beyond their obvious uses to replace inefficient manual meter reading techniques, these systems have become vitally important for utilities to meet the demands of their customers for tamper detection, outage detection, remote disconnect/reconnect, real time pricing, demand billing, interruptible service contracts, distribution automation and demand-side management.

In their wireless configuration, these systems employ low-power, radio frequency devices operating on offset channels in the 450-470 Mhz band, which serve

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<sup>1</sup> See, ¶ 7, bullet 2, of the Report and Order. See also, fn. 70: "Users currently licensed for 25 kHz operation on any of the low power offset channels will continue to be licensed for such operation until they decide to transition to narrowband equipment."

as the final link in automated communications networks which connect the utilities to meters on the premises of their customers.

**THE COMMISSION SHOULD RECONSIDER THE CREATION  
OF HIGH-POWER OFFSET CHANNELS**

The Commission's decision to allow high-power use of these offset channels has a serious impact on the planned and installed base of automated meters. Without specific instructions to the frequency coordinators to protect low-power offset users or a specific set-aside of low-power channels, the advent of high-power licensees on these channels will effectively negate the Commission's promise that existing uses and users may continue to operate indefinitely.<sup>2</sup> Simply put, on-channel co-existence between high- and low-power users is not possible.

Automated utility meters have been designed to have a useful life of approximately 10 years for gas or water meters and 15 to 20 years for electric meters. Therefore, the Commission's 10 year transition period to narrowband equipment is not adequate to avoid high costs due to equipment redesign and change-out.

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<sup>2</sup> The Commission has explicitly recognized this problem in the case of medical telemetry devices. See, Public Notice, DA 95-1771, released August 11, 1995, "FREEZE ON THE FILING OF HIGH POWER APPLICATIONS FOR 12.5 KHZ OFFSET CHANNELS IN THE 450-470 MHZ BAND (PR Docket 92-235, FCC 95-255)."

Moreover, the staged transition to narrowband equipment does nothing to protect existing systems or impending purchasers of existing systems from high-power, dispatch-type users who might succeed in licensing the new channels.

Accordingly, Schlumberger asks the Commission to reconsider § 90.267 to the extent that it fails to impose an affirmative obligation on frequency coordinators to protect low-power users, by stating protection criteria and/or to setting aside frequencies for low-power use. The present provisions of this rule give the coordinators the discretion, but not the direction, to protect low-power systems. In the competitive world of scarce radio frequencies, this is not realistic relief for low-power systems.

In view of the ongoing consideration of frequency coordination standards and channel set-asides, Schlumberger declines to suggest here the appropriate remedy beyond making the obligation to protect these important uses affirmative and not discretionary.

**THE COMMISSION SHOULD RECONSIDER §§ 90.203(J)(3) AND (5)  
TO THE EXTENT THAT THEY FAIL TO PERMIT SHOWINGS  
OF EQUIVALENT SPECTRUM EFFICIENCY**

In the wireless configuration, meters on the premises of utilities' customers are equipped with transmitters that operate at approximately 100 milliwatts. Clusters of these transmitters communicate with a "Concentrator," which is equipped with a transmitter that operates at approximately 400 milliwatts. A single Concentrator may service several hundred or even thousands of utility meters within a radius of up to a mile.

This is a highly efficient use of the radio spectrum. It can be demonstrated mathematically that this type of usage, even at a data rate of 2400 bps, meets or exceeds the Commission's new standards for channel efficiency, specified in §§ 90.203(j)(3) and (5). However, the rule as written fails to make any provision for such showings. Rather than processing the myriad waiver requests that are sure to be filed, the Commission can and should remedy the situation by adding the words "or equivalent" at the end of each sentence in subsections (j)(3) and (5).

**EXEMPTION FROM TECHNICAL STANDARDS SHOULD NOT BE LIMITED  
TO THE BUSINESS RADIO SERVICE**

Section 90.217, as written, provides an exemption from the technical standards of Subpart I of Part 90, for stations licensed in the Business Radio Service. This is a carryover from the present rule, but it ceases to have relevance in view of the Commission's decision to consolidate the separate radio services. This apparent oversight can be corrected by deleting the words "used at stations licensed in the Business Radio Service" from § 90.217(a).

**CONCLUSION**

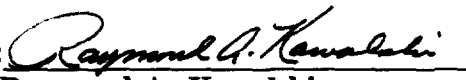
While it is understandable that the Commission has in this proceeding focused on the mobile dispatch operating model, the Commission must be aware of the niche users that have found a home in Part 90. Users such as utilities, who for years have employed Part 90 frequencies, without detriment to dispatch operations, for increasingly important automation applications, have already played a significant role in maximizing efficient spectrum utilization. They should not now be swept aside as if narrowbanding were the only way in which to accomplish spectrum efficiency.

The actions requested herein merely preserve the ability of highly efficient automated meter reading devices to continue to operate. These devices already meet

the spirit of the Commission's refarming initiative and for that they should be rewarded, not penalized.

**Respectfully submitted,**

**SCHLUMBERGER METER  
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**August 18, 1995**